

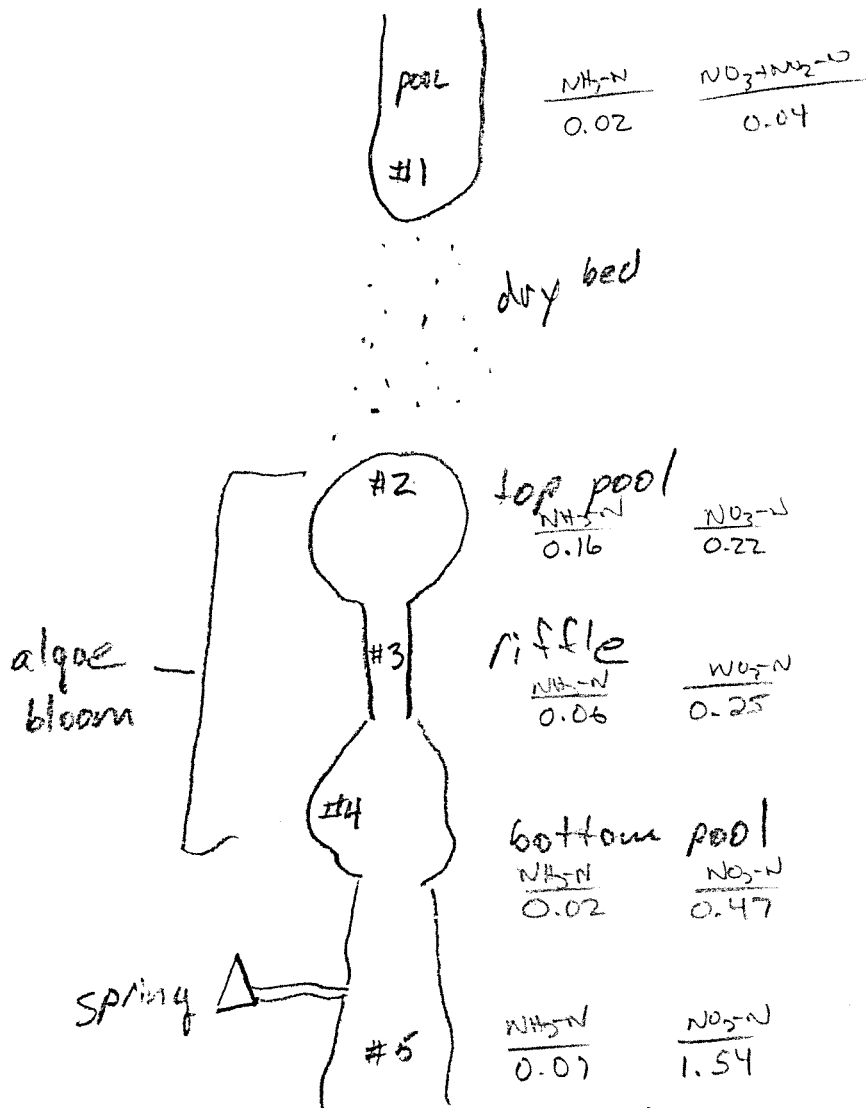
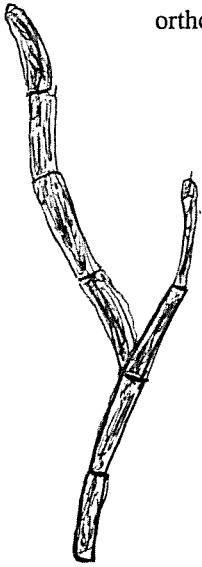
Thursday, March 04, 1999

To: Mike Lyday

From: Doug Harris

Re: Barton Creek Algae Bloom

I sampled 5 sites on Barton Creek in the general area of the algae bloom we spoke about on Wednesday. The algae bloom seems to occur mostly in an area consisting of 2 pools with a riffle in between. The first sample site was a pool above the pool the algae bloom started. There is about 100 yards of creek bed between this pool and the top pool of the algae bloom. The second sample was taken from the top of the pool where the bloom began. The third sample was taken in the riffle between the top and bottom pools where the algae bloom is. The fourth sample was taken from the bottom pool of the bloom, below the riffle. The final sample was taken from a riffle just below the spring app. 100 yards above Barton Springs Pool. The samples are now at Walnut Creek being analyzed for fecal coliform, nitrate-nitrite, ammonia, and ortho-p.



P.S. your algae sample is in Lab fridge door.

- Doug

Customer: Watershed Protection Program: Barton Algae Bloom
 Project: _____
 Contact: Mated Scoggins Phone No.: 499-1617 FAX No.: _____
 Collected by: D. Harris
 Date: 3-4-99
 Time: 13:30

Lab I.D. #	Sample Identification	Collected		Matrix	Container #/Type	Grab(G)/Comp(C)	Preservation / Verified	Analysis Requested
		Date	Time					
1	Top of Algae Pool	3/4/99	13:40	A-E	2-Walr	95 G	F-1	
2	Barton Below Spring		14:10					
3	Riddle		13:50					
4	Pool Below Riddle		14:00					
5	Pool Above Algae Bloom		13:30					
6								
7								
8								
9								
10								
11								
12								
13								
14								

Relinquished by: D. Harris
 Date: 3-4-99
 Time: 14:45
 Received by: [Signature]
 Date: 3/4/99
 Time: 1445

Relinquished by:
 Date:
 Time:
 Received by:
 Date:
 Time:
 Relinquished by:
 Date:
 Time:
 Received by:
 Date:
 Time:

Walnut Creek Environmental Lab	Instrument Lab		Water Lab
	Inorganic:	Organic:	
<input type="checkbox"/> TSS <input checked="" type="checkbox"/> NH3-N <input checked="" type="checkbox"/> NO3+NO2-N <input type="checkbox"/> VSS <input type="checkbox"/> TS <input checked="" type="checkbox"/> TKN <input checked="" type="checkbox"/> SO4 <input checked="" type="checkbox"/> F Coli <input type="checkbox"/> F Strep <input type="checkbox"/> Turbidity <input type="checkbox"/> pH <input type="checkbox"/> Alkalinity <input checked="" type="checkbox"/> Ortho Phosphate-P <input type="checkbox"/> PO4-P <input type="checkbox"/> TP <input type="checkbox"/> DP <input type="checkbox"/> TOC <input type="checkbox"/> COD	<input type="checkbox"/> Ag <input type="checkbox"/> Au <input type="checkbox"/> Al <input type="checkbox"/> As <input type="checkbox"/> B <input type="checkbox"/> Ba <input type="checkbox"/> Be <input type="checkbox"/> Cd <input type="checkbox"/> Cr <input type="checkbox"/> Cu <input type="checkbox"/> Fe <input type="checkbox"/> Hg <input type="checkbox"/> Mn <input type="checkbox"/> Mo <input type="checkbox"/> Ni <input type="checkbox"/> Pb <input type="checkbox"/> Sb <input type="checkbox"/> Se	<input type="checkbox"/> BTX <input type="checkbox"/> THM <input type="checkbox"/> VOC - GC 601/602 <input type="checkbox"/> VOC - GCMS 624 <input type="checkbox"/> SVC - GCMS 625 <input type="checkbox"/> GCMS Unknown Report <input type="checkbox"/> PCB's 608 / 6080 <input type="checkbox"/> Pesticides 608/ 1656 / 1657	<input type="checkbox"/> Tot Hardness

Special Instructions:
 Metals: Cd,Cu,Pb,Zn
 No acid: TSS, VSS, BOD, TOC, DP, F Coli, F Strep
 H2SO4: NH3-N, NO3+NO2-N, TKN, TP, COD
 Surcharge: TSS, BOD, COD, pH, FOG
 Compliance: NPDES RCRA SDWA

Comments: _____
 Preservation: F - Field L - Lab plus: 1 - Cool to 4C 2 - H2SO4 to pH <2
 3 - HNO3 to pH <2 4 - HCl to pH <2 5 - Na2S2O2 6 - None required 7 - Other, as noted
 Container: L - liter ml - milliliter P - Plastic G - Clear Glass AG - Amber Glass B - Bacli WP - Whirl-Pak VOA - 40ml vial



MEMORANDUM

TO: Ed Peacock, Engineer III
Environmental Resource Management

FROM: Richard Bosch, Senior Chemist
Water and Wastewater Utility

DATE: March 15, 1999

SUBJECT: Final Report for the Barton Creek samples collected on
March 4, 1999.

For the Barton Creek samples collected on March 4, 1999, the following attachments are included:

- Parameter Results and Billing Information Report
- Parameter Results Report
- Analysis Date Report
- Quality Control Report
- Original COC

Currently, a journal voucher for \$ 170.00 is being processed under ORG # 2332 and OBJ. CODE # 5730 for these analyses.

If you have any questions about the results, please contact me at 927-4012.

RICHARD BOSCH

Richard Bosch, Senior Chemist
Water and Wastewater Utility

Parameter Results and Billing Information for: BARTON CREEK
 04-MAR-99 to 04-MAR-99 Cost: \$170.00

Collection Date	Sample Name	SM 4500-NH3 F NH3-N MG/L \$5.00	EPA 353.2 NO3+NO2-N MG/L \$15.00	SM 4500-P E ORTHO-P MG/L \$5.00	SM 9222 D FCOLI COL/100ML \$9.00
04-MAR-99	TOP OF ALGAE POOL-4MAR9 - #2	0.16	0.22	<0.02	13
04-MAR-99	BARTON BELOW SPRG-4MAR9 - #5	0.07	1.54	<0.02	20
04-MAR-99	RIFLE-4MAR9 - #3	0.06	0.25	<0.02	3
04-MAR-99	POOL BELOW RIFLE-4MAR9 - #4	0.02	0.47	<0.02	51
04-MAR-99	POOL ABOVE ALGAE BLOOM-4MAR9 - #1	0.02	0.04	<0.02	26
		5	5	5	5
		\$25.00	\$75.00	\$25.00	\$45.00

Laboratory Services Division
 Parameter Results for BARTON CREEK
 Samples Collected Between 04-MAR-99 and 04-MAR-99

This data has been proofed by a Laboratory Official: YES

Sample Name	SM 4500-NH3 F NH3-N MG/L	EPA 353.2 NO3+NO2-N MG/L	SM 4500-P E ORTHO-P MG/L	SM 9222 D FCOLI COL/100ML
04-MAR-99 TOP OF ALGAE POOL-4MAR9	0.16	0.22	<0.02	13
04-MAR-99 BARTON BELOW SPRG-4MAR9	0.07	1.54	<0.02	20
04-MAR-99 RIFFLE-4MAR9	0.06	0.25	<0.02	3
04-MAR-99 POOL BELOW RIFFLE-4MAR9	0.02	0.47	<0.02	51
04-MAR-99 POOL ABOVE ALGAE BLOOM-4MAR9	0.02	0.04	<0.02	26
Count	5	5	5	5
Maximum	0.16	1.54		51.00
Minimum	0.02	0.04		3.00
Average	0.07	0.50		22.60

System for Laboratory Information Management

Lab: walnut

Program_cd: BARTON CREEK

Date Requested: 04-MAR-99 to 04-MAR-99

Collection Date	Sample Name	FCOLI COL/100ML	NH3-N MG/L	NO3+NO2-N MG/L	ORTHO-P MG/L
04-MAR-99	TOP OF ALGAE POOL-4MAR9	05-MAR-99	09-MAR-99	10-MAR-99	10-MAR-99
04-MAR-99	BARTON BELOW SPRG-4MAR9	05-MAR-99	09-MAR-99	10-MAR-99	10-MAR-99
04-MAR-99	RIFLE-4MAR9	05-MAR-99	09-MAR-99	10-MAR-99	10-MAR-99
04-MAR-99	POOL BELOW RIFFLE-4MAR9	05-MAR-99	09-MAR-99	10-MAR-99	10-MAR-99
04-MAR-99	POOL ABOVE ALGAE BLOOM-4MAR9	05-MAR-99	09-MAR-99	10-MAR-99	10-MAR-99

System for Laboratory Information Management
 *** Q/C Report for Blank's (BLK's) and Standards (STD's) ***
 Q/C Testing from 04-MAR-99 to 04-MAR-99

Analysis Date	Parameter	Batch	BLK1 COL/100ML	BLK1 MG/L	BLK2 COL/100ML	BLK2 MG/L	STD1 MG/L	% Rec.	STD2 MG/L	% Rec.
05-MAR-99	FCOLI	83426	0	0.00	0.		0.10	100	1.00	107
09-MAR-99	NH3-N	83681		-0.01			0.15	100		
10-MAR-99	NO3+NO2-N	83674		0.00		0.00	0.10	100		
10-MAR-99	ORTHO-P	83590								

System for Laboratory Information Management
 *** Q/C Report for Blank's (BLK's) and Standards (STD's) ***
 Q/C Testing from 04-MAR-99 to 04-MAR-99

analysis Date	Parameter	Batch	STD3 MG/L	% Rec.
5-MAR-99	FCOLI	83426		
9-MAR-99	NH3-N	83681	10.0	102
0-MAR-99	NO3+NO2-N	83674		
0-MAR-99	ORTHO-P	83590		

System for Laboratory Information Management
 *** Q/C Report for Duplicate Samples (DUP's) ***
 Q/C Testing from 04-MAR-99 to 04-MAR-99

Analysis Date	Parameter	Batch	Q/C	DUP1 COL/100ML	DUP1 MG/L	DUP2 COL/100ML	DUP2 MG/L
5-MAR-99	FCOLI	83426 A		24		16	
9-MAR-99	NH3-N	83681 A			0.03		0.02
9-MAR-99	NH3-N	83681 B			0.02		0.02
0-MAR-99	NO3+NO2-N	83674 A			0.22		0.21
0-MAR-99	NO3+NO2-N	83674 B			1.54		1.55
0-MAR-99	ORTHO-P	83590 A			<0.02		<0.02

System for Laboratory Information Management
 *** Q/C Report for Spiked samples (SPK's) and Check Standards (STD's) ***
 Q/C Testing from 04-MAR-99 to 04-MAR-99

Analysis Date	Parameter	Batch	Q/C	SPK1 MG/L	% Rec.	STD1 MG/L	% Rec.
19-MAR-99	NH3-N	83681	A	0.10	80	0.10	90
19-MAR-99	NH3-N	83681	B	0.10	80	0.10	90
0-MAR-99	NO3+NO2-N	83674	A	0.50	108	0.15	100
0-MAR-99	NO3+NO2-N	83674	B	0.50	112	0.15	93
0-MAR-99	ORTHO-P	83590	A	0.10	90	0.10	100

Customer: Watershed Protection Program: Barton Algae Bloom
 Project: Muted Seagins Phone No.: 499-1617 FAX No.:
 Collected by: D. Harris
 Date: 3-4-99
 Time: 13:30

Lab I.D. #	Sample Identification	Collected		Matrix	Container #/Type	Grab(G)/Comp(C) / Verified	Analysis Requested
		Date	Time				
1	Top of Algae Pool	3/4/99	17:40	A-E	2 Whirlpak G	F-1	
2	Barton Below Spring		14:30				
3	Riffle		13:30				
4	Pool Below Riffle		14:00				
5	Pool Above Algae Bloom		13:30				
6							
7							
8							
9							
10							
11							
12							
13							
14							

Relinquished by: D. Harris
 Date: 3-4-99
 Time: 14:45
 Received by: [Signature]
 Date: 3/4/99
 Time: 14:45

Relinquished by:
 Date:
 Time:
 Received by:
 Date:
 Time:
 Relinquished by:
 Date:
 Time:
 Received by:
 Date:
 Time:

Comments:

Walnut Creek Environmental Lab		Instrument Lab		Water Lab	
<input checked="" type="checkbox"/> NH3-N	<input type="checkbox"/> BOD1	<input type="checkbox"/> Inorganic:	<input type="checkbox"/> Organic:	<input type="checkbox"/> Total Hardness	<input type="checkbox"/> Special Instructions:
<input checked="" type="checkbox"/> NO3+NO2-N	<input type="checkbox"/> CBOD	<input type="checkbox"/> Ag	<input type="checkbox"/> BTEX	<input type="checkbox"/> Metals: Cd,Cu,Pb,Zn	
<input checked="" type="checkbox"/> TKN	<input type="checkbox"/> Cl	<input type="checkbox"/> Al	<input type="checkbox"/> THM	<input type="checkbox"/> No acid: TSS, VSS, BOD, TOC, DP, F Coll, F Strep	
<input checked="" type="checkbox"/> SO4	<input type="checkbox"/> SO4	<input type="checkbox"/> As	<input type="checkbox"/> VOC - GC 601/602	<input type="checkbox"/> H2SO4: NH3-N, NO3+NO2-N, TKN, TP, COD	
<input checked="" type="checkbox"/> FOG	<input type="checkbox"/> FOG	<input type="checkbox"/> B	<input type="checkbox"/> VOC - GCMS 624	<input type="checkbox"/> Surcharge: TSS, BOD, COD, pH, FOG	
<input type="checkbox"/> Cl2	<input type="checkbox"/> Cl2	<input type="checkbox"/> Ba	<input type="checkbox"/> SVC - GCMS 625	<input type="checkbox"/> Compliance: <input type="checkbox"/> NPDES <input type="checkbox"/> RCRA	
<input type="checkbox"/> DO	<input type="checkbox"/> DO	<input type="checkbox"/> Be	<input type="checkbox"/> GCMS Unknown Report		
<input type="checkbox"/> Ortho Phosphate-P	<input type="checkbox"/> TPH	<input type="checkbox"/> Bi	<input type="checkbox"/> PCB's 608 / 8080		
<input type="checkbox"/> TP		<input type="checkbox"/> Cd	<input type="checkbox"/> Pesticides 608/ 1656 / 1657		
<input type="checkbox"/> DP		<input type="checkbox"/> Cr			
<input type="checkbox"/> TOC		<input type="checkbox"/> Cu			
<input type="checkbox"/> COD		<input type="checkbox"/> Fe			
		<input type="checkbox"/> Hg			
		<input type="checkbox"/> Mn			
		<input type="checkbox"/> Mo			
		<input type="checkbox"/> Ni			
		<input type="checkbox"/> Pb			
		<input type="checkbox"/> Sb			
		<input type="checkbox"/> Se			
		<input type="checkbox"/> Ti			
		<input type="checkbox"/> Zn			
		<input type="checkbox"/> Ca			
		<input type="checkbox"/> Mg			
		<input type="checkbox"/> K			
		<input type="checkbox"/> Na			
		<input type="checkbox"/> Total CN			
		<input type="checkbox"/> Total Phenol			

Matrix: W - Drinking Water WW - Wastewater IW - Industrial Waste E - Environmental
 Plus: A - Aqueous S - Sludge / Soil H - Hazardous / Contaminated
 Container: L - liter ml - milliliter P - Plastic G - Clear Glass AG - Amber Glass B - Bacii WP - Whirl-Pak VOA - 40ml vial
 Preservation: F - Field L - Lab plus: 1 - Cool to 4C 2- H2SO4 to pH <2
 3- HNO3 to pH <2 4-HCl to pH <2 5-Na2S2O2 6-None required 7-Other, as noted